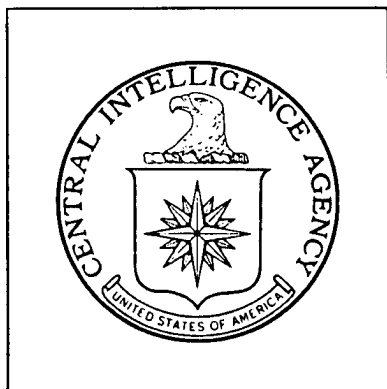


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**DIRECTORATE OF
INTELLIGENCE**

**Industrial Facilities
(Non-Military)**

Basic Imagery Interpretation Report

**Major Electric Power Plants
Yunnan Province, China**

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DATE MAY 1970

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CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
Imagery Analysis Service

ABSTRACT

This report covers the nine major electric power plants in Yunnan Province, southern China. It updates the previous basic reports on the three plants at Chiang-pien-chieh, Hsuan-wei, and Hui-tse, and two each at Kai-yuan and Kun-ming, and provides the initial basic reports on two thermal power plants at Jen-ho-chieh. The latest information used in this report is dated December 1969 for Hsuan-wei and March 1970 for the other plants.

Jen-ho-chieh Thermal Power Plant 1 has two independent power-producing units, each with a boilerhouse and generator hall. It also contains a coal storage and processing facility, a water treatment facility, and several support buildings. In March 1966, when the plant was first seen on photography, the southern boilerhouse and generator hall and the associated switching yard were complete. The southern boilerhouse has not been seen operating. The northern boilerhouse and generator hall and its associated switching building were about half complete in March 1966 and they appeared to be complete in January 1967. The northern boilerhouse was seen operating on  in March, April, and August 1969, and in January 1970, but it was not operating in January 1969. Because of small-scale photography, it has not been possible to determine whether the plant was operating on 19 December 1968 or in March 1970.

Jen-ho-chieh Thermal Power Plant 2 was first seen under construction in March 1966. The generator hall, the switching building, and the coal storage and processing facility were complete by September 1969 and the boilerhouse was complete by December 1969. In March 1970, what appeared to be foundations were observed adjacent to the boilerhouse and generator hall. The plant was operating in December 1969 and March 1970.

No construction or dismantling has been observed at the other seven plants since the previous reports. On the latest coverage, six of the seven plants were operating. Kun-ming Thermal Power Plant Pu-ping-tsun did not appear to be operating.

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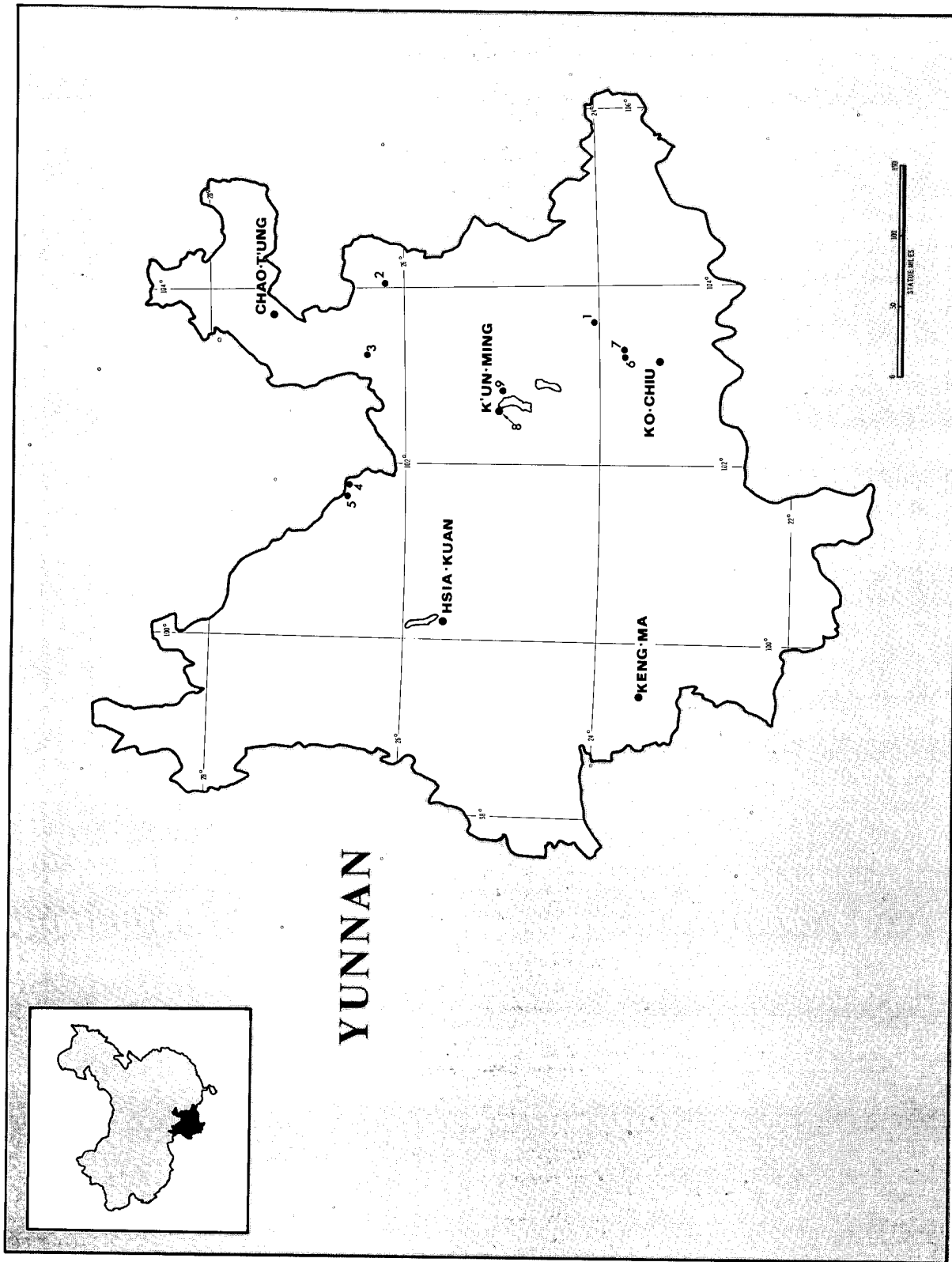


FIGURE 1. LOCATION MAP.

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INTRODUCTION

This report presents information on the current status of each of the nine major power plants in Yunnan Province and describes any changes since the previous reports.

The following list of the plants studied is keyed to Figure 1.

1. Chiang-pien-chieh Hydro Power Plant Liu-lang-tung.
2. Hsuan-wei Thermal Power Plant Jung-feng.
3. Hui-tse Hydro Power Plant I-li-ho 1.
4. Jen-ho-chieh Thermal Power Plant 1.
5. Jen-ho-chieh Thermal Power Plant 2.
6. Kai-yuan Thermal Power Plant.
7. Kai-yuan Thermal Power Plant Chemical Plant.
8. Kun-ming Thermal Power Plant Pu-ping-tsun.
9. Kun-ming Thermal Power Plant Yang-tsung-hai.

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INSTALLATION OR ACTIVITY NAME		COUNTRY
Chiang-pien-chieh Hydro Power Plant Liu-lang-tung		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	
48RUB600556	24-00-12N 103-37-22E	
MAP REFERENCE		
ACIC. USATC, Series 200, Sheet M0496-23HL, 1st ed, Feb 68, Scale 1:200,000 (SECRET)		
LATEST IMAGERY USED		NEGATION DATE (If required)
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BASIC DESCRIPTION

No changes have been observed at Chiang-pien-chieh Hydro Power Plant since May 1968, the date of the latest photography used in the previous report. The plant was operating in March 1970 as indicated by water turbulence in the tailrace.

REFERENCES

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Document

CIA. BCS 13/0222/69, Chiang-pien-chieh Hydro Power Plant (Liu-lang-tung),
March 1969, (TOP SECRET RUFF)

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Hsuan-wei Thermal Power Plant Jung-feng		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
48RVD105960	26-10-59N 104-06-38E		
MAP REFERENCE			
ACIC. USATC, Series 200, Sheet M0496-13HL. 3rd ed. Jan 68. Scale 1:200,000			25X1
(SECRET)			
LATEST IMAGERY USED	NEGATION DATE (If required)		
	NA		25X1

BASIC DESCRIPTION

No changes have been observed at Hsuan-wei Thermal Power Plant since January 1968, the date of the latest photography used in the previous report.

The plant was operating in December 1969. Smoke was issuing from the stack.

REFERENCE

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Document

CIA. BCS 13/0020/69, Hsuan-wei Thermal Power Plant (Jung-feng), August 1968
(TOP SECRET RUFF)

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INSTALLATION OR ACTIVITY NAME	COUNTRY
Hui-tse Hydro Power Plant I-li-ho I	CH

UTM COORDINATES	GEOGRAPHIC COORDINATES
48RUE272154	26-20-55N 103-16-00E

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USATC, Series 200, Sheet 0496-12HL, 1st ed, Sep 62, Scale 1:200,000
(SECRET)

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LATEST IMAGERY USED

NEGATION DATE (If required)

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BASIC DESCRIPTION

No changes have been observed at the Hui-tse Hydro Power Plant since January 1968, the date of the latest photography used in the previous report.

The plant was operating in March 1970 as indicated by turbulence at the powerhouse discharge.

REFERENCES

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Document

CIA. BCS 13/0054/69, Hui-tse Hydro Power Plant (I-li-ho I), October 1968

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Jen-ho-chieh Thermal Power Plant I		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES	COMIREX NO.	NIETB NO.
47RQV675415	26-34-00N 101-42-00E	None	None
MAP REFERENCE			

AMS. Series L500, Sheet NG 47-8, 1954, Scale 1:250,000 (Unclassified)

LATEST IMAGERY USED	NEGATION DATE (If required)
	NA

BASIC DESCRIPTION

Jen-ho-chieh Thermal Power Plant I is located 4 nm north-northwest of Jen-ho-chieh, on the Chin-sha River. The plant area is approximately 1,400 by 450 feet and is secured by a wall. It is served by road. The plant is part of the industrial complex under construction at Jen-ho-chieh.

The plant has two independent power-producing units, each with a boilerhouse and generator hall. It also contains a coal storage and processing facility, a water treatment facility, and several support buildings.

In March 1966, when the plant was first seen on photography, the southern boilerhouse and generator hall and the associated switching yard were complete. The boilerhouse is served by a single stack and contains four boilers, as indicated by the configuration of the flue system. It has not been possible to determine the number of turbogenerators, transformers, and circuits. The southern boilerhouse has not been seen operating.

The northern boilerhouse and generator hall and the associated switching building were about half complete in March 1966 and they appeared to be complete in January 1967. The boilerhouse is served by a single stack. It has not been possible to determine the number of boilers. The generator hall contains at least three turbogenerators, as indicated by three circuit supports and three transformers. Smoke was first seen emanating from the northern stack on [redacted] indicating that the northern boilerhouse was operating. It was operating in March, April, and August 1969 and January 1970, but not in January 1969. The small scale of the photography on [redacted] and March 1970 precluded determining whether the plant was operating.

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FIGURE 3. JEN-HO-CHIEH THERMAL POWER PLANT 2.

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Key to Annotations		
Item	Description	Dimensions (Ft)
1	Switching Building (Roofed Section)	400 x 80 (110 x 80)
2	Coal Storage and Processing Facility (Roofed Section)	465 x 105 (145 x 105)
3	Boilerhouse	210 x 115
4	Generator Hall	260 x 90

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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Jen-ho-chieh Thermal Power Plant 2		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES	COMIREX NO.	NIETB NO.
47RQV580440	26-35-30N 101-35-30E	None	None

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MAP REFERENCE

AMS. Series L500, Sheet NG 47-8, 1954, Scale 1:250,000 (Unclassified)

LATEST IMAGERY USED	NEGATION DATE (If required)

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BASIC DESCRIPTION

Jen-ho-chieh Thermal Power Plant 2 is located about 9 nm northwest of Jen-ho-chieh, on the Chin-sha River. It is served by a road, and a rail spur to the plant is under construction. It occupies an area 1,500 by 1,000 feet. No security fencing has been observed.

The plant was first seen under construction on photography of March 1966. By December 1968 it was in a midstage of construction. The switching building, the generator hall, and the coal storage and processing facility were complete by September 1969, and the boilerhouse was complete by December 1969. In March 1970, what appeared to be building foundations were observed adjacent to the boilerhouse and generator hall.

The boilerhouse is served by a single masonry stack. The flue system indicates that there are four boilers. The small scale of the photography precludes identifying transformers and switching gear.

The plant was operating in December 1969 and March 1970 as indicated by light smoke emanating from the stack.

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INSTALLATION OR ACTIVITY NAME		COUNTRY
Kai-yuan Thermal Power Plant		CH
UTM COORDINATES 48QUB220212	GEOGRAPHIC COORDINATES 23-41-38N 103-15-00E	
MAP REFERENCE 548th RTG. USATC, Series 200, Sheet M0616-2HL. 4th ed. Sep 68. Scale 1:200,000 (SECRET,)		
LATEST IMAGERY USED	NEGATION DATE (If required)	
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BASIC DESCRIPTION

No changes have been observed at the Kai-yuan Thermal Power Plant since March 1968, the date of the latest photography used in the previous report.

The plant was operating in March 1970. Heavy smoke was emanating from both stacks and two of the three spray ponds were in operation.

REFERENCES

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Document

CIA. BCS 13/0040/69, Kai-yuan Thermal Power Plant, October 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY	
Kai-yuan Thermal Power Plant Chemical Plant		CH	
UTM COORDINATES	GEOGRAPHIC COORDINATES		25X1
48QUB217256	23-44-05N 103-14-41E		
MAP REFERENCE			
548th RTG. USATC, Series 200. Sheet M0616-2HI. 4th ed. Sep 68. Scale 1:200,000.			25X1
(SECRET)			
LATEST IMAGERY USED		NEGATION DATE (If required)	
		NA	25X1

BASIC DESCRIPTION

No changes have been observed at this plant since March 1968, the date of the latest photography used in the previous report.

The plant was operating in March 1970. Heavy smoke was emanating from the stack.

REFERENCES

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Documents

CIA. BCS 13/0041/68. Kai-yuan Thermal Power Plant (Chemical Plant), October 1968, (TOP SECRET RUFF)

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INSTALLATION OR ACTIVITY NAME		COUNTRY
Kun-ming Thermal Power Plant Pu-ping-tsun		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	
48RTC590680	25-00-07N 102-36-55E	
MAP REFERENCE		
ACIC. USATC, Series 200 Sheet M0496-17H1 3rd ed Jan 68 Scale 1:200,000 (SECRET)		
LATEST IMAGERY USED		NEGATION DATE (If required)
		NA

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BASIC DESCRIPTION

No changes have been observed at Kun-ming Thermal Power Plant Pu-ping-tsun since April 1968, the date of the latest photography used in the previous report.

The plant did not appear to be operating on May 1968 through March 1970 photography. However, the small scale and poor quality of the photography may have precluded the observation of smoke or vapor.

REFERENCES

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Document

CIA. BCS 13/0002/69, Kun-ming Thermal Power Plant (Pu-ping-tsun), August 1968,
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INSTALLATION OR ACTIVITY NAME		COUNTRY
Kun-ming Thermal Power Plant Yang-tsung-hai		CH
UTM COORDINATES	GEOGRAPHIC COORDINATES	25X1
48RUC005615	24-57-31N 103-01-35E	
MAP REFERENCE		
ACIC. USATC Series 200, Sheet M0496-17HL. 3rd ed. Jan 68. Scale 1:200,000 (SECRET)		
LATEST IMAGERY USED		NEGATION DATE (If required)
		NA

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BASIC DESCRIPTION

No changes have been observed at Kun-ming Thermal Power Plant Yang-tsung-hai since January 1968, the date of the latest photography used in the previous report.

The plant was operating in March 1970. Heavy smoke was emanating from one of the two stacks. No activity was observed at the spray pond.

REFERENCES

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Document

CIA. BCS 13/0003/69, Kun-ming Thermal Power Plant (Yang-tsung-hai), August 1968, (TOP SECRET RUFF)

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